

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



1  
Ag84 Pro  
Pro. kid # 759  
Copy 2

# 759

WATCH  
FOR  
NEW

PLANT  
PESTS

CROPS PROTECTION  
RESEARCH BRANCH

Rec' FEB 2 1967

Answered \_\_\_\_\_

LIBRARY  
RECEIVED  
FEB 6 1967  
U. S. DEPARTMENT OF AGRICULTURE  
BELTSVILLE BRANCH

# the BALUCHISTAN MELON FLY



# The Baluchistan Melon Fly

***The Baluchistan melon fly<sup>1</sup> is not known to occur in the United States. It may get in. If it does, and if it becomes established, the Baluchistan melon fly will cause serious crop damage and financial loss. Watch for this insect and for any other insects you do not recognize. Report them promptly so they may be identified, controlled, and possibly eradicated.***

In South Asia and the Middle East, the Baluchistan melon fly is a serious pest of melons. It has greatly curtailed the production of watermelon, cucumber, and muskmelon in these regions.

In Israel, up to 60 percent of watermelon crops and 85 to 90 percent of muskmelons and other melons are infested in some years.

In Baluchistan, Pakistan, if the crop is bagged against fly attack, 40,000 melons can be produced in an area where only 2,500 can be produced if

the crop is not bagged. History and distribution of this insect indicate it to be more capable of adapting itself to conditions in the United States, if introduced, than any other melon fly.

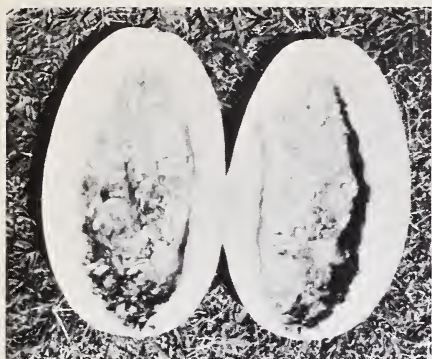
Host plants are watermelon, cucumber, cantaloup, snake melon, pumpkin, squirting cucumber, and phoont (*Cucumis trigonis*).

The impact the Baluchistan melon fly might have on the economy of our agriculture, should the pest become established here, is indicated by the value of some of its preferred host crops. The values below are for

<sup>1</sup> *Myiopardalis pardalina* (Bigot).



Geographic distribution. Red areas indicate parts of the world where the Baluchistan melon fly occurs.



*Melon damage caused by the Baluchistan melon fly.*

crops produced in the United States in 1963.

<i>Crop</i>		<i>Value</i>
Watermelons	—	\$40 million
Cucumbers	—	\$50 million
Cantaloups	—	\$67 million

## DESCRIPTION OF INSECT

The adult Baluchistan melon fly is  $\frac{1}{4}$  to  $\frac{1}{3}$  inch long. The head of the adult is golden colored. The eyes are not prominent. Antennae are golden. The thorax is reddish on top and pale yellow underneath, and is covered with fine golden hairs. The abdomen is triangular and slightly darker than the head. Legs are clear pale yellow. Wings are transparent and have one yellow spot near the base, a yellow band across the middle, and a V-shaped yellow-brown mark near the tip. The larva is creamy white.

## DESCRIPTION OF DAMAGE

Adult Baluchistan melon flies feed on the juices of host plants, and the females deposit their eggs in the pulp of fruit, preferably in newly set fruit. Dead spots appear around the punctures. The larvae that hatch from

the eggs are responsible for the damage. The larvae burrow into the fruits and feed on seeds, juice, and pulp until time for pupation. The burrowing causes rapid decomposition.

## THE PLANT PEST PROBLEM

At least half of our most destructive insects entered the United States from other countries, many before the Plant Quarantine Act of 1912 was passed. Today, thousands of plant pests are intercepted at our borders by plant quarantine inspectors, but some gain entry.

When a new pest is detected, organized efforts are exerted to (1) pinpoint the areas where it has become established, (2) set up a quarantine to prevent spread, and (3) control the pest and eradicate it if possible. The sooner a new pest is detected, the better is the chance of controlling it before it does serious damage.



*Adult and maggot of the Baluchistan melon fly.*



## WHAT YOU CAN DO

Watch for the Baluchistan melon fly. It most likely would be found in the larval stage infesting the fruit of one of its many hosts. The flies probably would be seen in early morning or late afternoon on foliage and fruit. In certain areas of this country, the insect could be active throughout the year.

If you find creamy-white larvae, of typical maggot appearance, in fruit, melons, or vegetables, and you are not certain what they are, send speci-

mens to your nearest agricultural official. Send adult flies also, if they fit the description of the Baluchistan melon fly or if you do not recognize them. Mail specimens in a small bottle containing rubbing alcohol. Include a note giving your name and address, date of collection, and locality where the specimens were found and on what plant. Do not send live specimens. If your local agricultural official does not recognize the specimens, he will send them to the proper authorities for identification.

●

*Prepared by*

Plant Pest Control Division  
Agricultural Research Service

Washington, D.C.

Issued January 1967

For sale by the Superintendent of Documents, U.S. Government Printing Office  
Washington, D.C. 20402 - Price 10 cents